

1 **Claims**

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3 1. The use of (i) a naked binding member which
4 binds to both SCR1 and SCR2 of CD55 or (ii) a
5 nucleic acid encoding said binding member in the
6 preparation of a medicament for the neutralisation
7 of CD55.

8

9 2. The use of (i) a naked binding member which
10 binds to both SCR1 and SCR2 of CD55 or (ii) a
11 nucleic acid encoding said binding member in the
12 preparation of a medicament for the enhancement of
13 complement deposition on a tissue.

14

15 3. The use of (i) a naked binding member which
16 binds to both SCR1 and SCR2 of CD55 or (ii) a
17 nucleic acid encoding said binding member in the
18 preparation of a medicament for treating cancer.

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20 4. The use according to claim 3 wherein the cancer
21 is one or more of colorectal, breast , ovarian,
22 cervical, gastric, lung, liver, skin and myeloid
23 (e.g. bone marrow) cancer.

24

25 5. The use according to any one of the preceding
26 claims wherein the binding member is an antibody or
27 a fragment thereof.

28

29 6. The use according to any one of the preceding
30 claims wherein the binding member binds to amino
31 acids 83-93 and SCR2 amino acids 101-112 and amino
32 acids 145-157 of the sequences shown in Figure 1b.

- 1 7. The use according to any one of the preceding
2 claims wherein the binding member comprises one or
3 more of the CDRs of the antibody, or a fragment
4 thereof, produced by the cell line deposited at ATCC
5 under accession number HB9173.
6
- 7 8. The use according to any one of the preceding
8 claims wherein the binding member is the antibody
9 791T/36 produced by the hybridoma cell deposited at
10 ATCC under accession number HB9173.
11
- 12 9. The use according to any one of claims 1 to 7
13 wherein the binding member comprises at least one
14 human constant region.
15
- 16 10. A naked binding member which binds to both SCR1
17 and SCR2 for use in the treatment of cancer.
18
- 19 11. A naked binding member, which binds to both
20 SCR1 and SCR2 of CD55, and an active agent as a
21 combined preparation for simultaneous, separate or
22 sequential use in the treatment of cancer.
23
- 24 12. The combined preparation according to claim 11,
25 wherein said active agent is a Doxorubicin, taxol,
26 5-Fluorouracil, Irinotecan or Cisplatin.
27
- 28 13. The combined preparation according to claim 11
29 wherein said active agent is an antibody.
30
- 31 14. The combined preparation according to claim 13
32 wherein said active agent is an anti-CD20 antibody;

1 an anti-VEGF antibody; an anti-CD171A antibody; an
2 anti-CEA anti-idiotypic mAb; an anti-EGFR antibody;
3 an anti-HMFG anti-idiotypic mAb; an anti-EGFR
4 antibody, or an anti-HER2 antibody e.g. Herceptin,
5 Genentech (South San Francisco, CA, USA).

6
7 15. The naked binding member according to any one
8 of claims 10 to 11, or the combined preparation
9 according to any one of claims 12 to 14 wherein the
10 naked binding member is as defined in any one of
11 claims 1 to 9.

12
13 16. A pharmaceutical composition for the treatment
14 of cancer, wherein the composition comprises a naked
15 binding member that binds to both SCR1 and SCR2 of
16 CD55 and a pharmaceutically acceptable excipient,
17 diluent or carrier.

18
19 17. The pharmaceutical composition according to
20 claim 16, wherein the naked binding member is as
21 defined in any one of claims 1 to 9.

22
23 18. A method of neutralisation of CD55, comprising
24 administration of a naked binding member which
25 specifically binds to SCR1 and SCR2 of CD55.

26
27 19. A method of enhancing complement deposition
28 comprising administration of a naked binding member
29 which specifically binds to SCR1 and SCR2 of CD55.

30
31 20. A method of treating cancer comprising
32 administration of a therapeutically effective amount

1 of a naked binding member which specifically binds
2 to SCR1 and SCR2 of CD55 to a mammal in need
3 thereof.

4

5 21. A method according to any one of claims 16 to
6 18 wherein the naked binding member is as defined in
7 any one of claims 1 to 9.

8

9 22. An assay method for identification of an agent
10 capable of inhibiting CD55 comprising step:

11

12 a) bringing into contact a candidate agent with at
13 least a portion of SCR1 and SCR2 of CD55; and

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15 b) determining binding of said candidate agent to
16 both SCR1 and SCR2.

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18 23. An assay method for identification of an agent
19 capable of inhibiting CD55 comprising:

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21 (a) bringing into contact a candidate agent with at
22 least a portion of SCR1 and SCR2 of CD55 in the
23 presence of a naked binding member which in the
24 absence of the candidate agent is capable of
25 binding both SCR1 and SCR2 of CD55; and

26

27 (b) determining the extent to which the candidate
28 agent inhibits binding of the naked binding
29 member to SCR1 and SCR2 of CD55.

30

1 24. The assay method according to claim 23 wherein
2 the binding member is as defined in any one of
3 claims 6 to 9.

4

5 25. The assay method according to any one of claims
6 22 to claim 24 further comprising step (c) selecting
7 a candidate agent which bind both SCR1 and SCR2 of
8 CD55; and/or step (d) determining the amount of
9 complement deposition on a cell sample in the
10 presence and absence of the candidate agent.

11

12 26. The assay method according to any one of claims
13 22 to 25 wherein said portion of SCR1 and SCR2 of
14 CD55 comprises amino acids 83-93, 101-112 and 145-
15 157 of the sequences shown in Figure 1b.

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17 27. Use of an agent identified by the assay method
18 of any one of claims 22 to 26 in the manufacture of
19 a medicament for the treatment of cancer.

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